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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/422,998	10/21/1999	DANIEL W. HEPNER	10990763-1	6218

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HEWLETT PACKARD COMPANY  
INTELLECTUAL PROPERTY ADMINISTRATION  
3404 E HARMONY ROAD  
P.O. BOX 272400  
FORT COLLINS, CO 80528-9599

EXAMINER

PHAM, HUNG Q

ART UNIT	PAPER NUMBER
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2172

DATE MAILED: 07/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/422,998

Applicant(s)

HEPNER ET AL.

Examiner

HUNG Q PHAM

Art Unit

2172

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5, 7-14, 16-18 and 20-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-14, 16-18 and 20-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant amended claims 1, 7, 18 and 22 in the amendment filed on 04/22/2004, and re-amended claim 1 in the amendment filed on 06/04/2004. The changes of claim 1 are not intended to narrow the scope of claim 1 in any manner, and the request of changes was initiated by examiner in the teleconference on June 3, 2004.

Examiner thanks you applicant and applicant's representative, Jody Bishop, for cooperating with examiner by re-amending claim 1 to make it consistent with claims 13 and 18 because the claims were allowable over the art of record as indicated by examiner in the teleconference. However, by updating the search, the claims are still anticipated, or rendered obvious over USP 6,182,249 that was issued to Wookey et al. Therefore, another non final Office Action will be detailed as below. Examiner truly regrets and apologizes for any inconvenience may cause due to the examiner's indication of allowance in the teleconference.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**3. Claims 1-5 and 8-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Wookey et al. [USP 6,182,249].**

Regarding to claim 1, Wookey teaches a method of monitoring the state and generating alerts indicating predefined conditions exist in a computer system (Abstract and Col. 1, Lines 20-23). As shown in FIGS. 1a and 1b, computer system 100 receives raw diagnostic data from a monitored computer system 102. Monitored computer system 102 runs diagnostic tests on a periodic basis (Col. 3, Line 63-Col. 4, Line 26) by using *a reporting application, which includes computer-executable software code stored to a computer-readable medium* as shown in FIG. 2. The raw diagnostic data, which contains information about the software and hardware components in monitored system 102, is processed to extract the information associated with hardware and software to create a host state, which is the state of the monitored system over the particular time period that

Art Unit: 2172

the diagnostic tests were run (Col. 5, Lines 31-47). FIG. 11 is an example of the host state. Once host states have been created, the data can be analyzed for the presence of alerts, which are predefined conditions in the various components of the monitored computer system that indicate operating conditions within the system. Two available types of alerts are spot alert and predictive alert (Col. 11, Line 56-Col. 12, Line 26). For example, if an alert is to determine if a particular partition has exceeded a predetermined percentage used, the alert includes a token for the partition name, e.g., /var. A second token utilized is partition percentage used. The alert determines if partition name=/var AND percentage used is 80%. When those two conditions are true, the alert is raised (Col. 12, Lines 44-55). As seen, *the reporting application receives alert as a request from a client to notify said client of a condition of an attribute of a system*, and an alert as *request comprises* a name of the monitored system attribute also a predetermined condition as *information specifying a query for said system attribute*. The defined alert with information specifying a *query and the reporting application is used for monitoring said system for* a particular value of a system component has exceeded a threshold value, or the number of memory parity errors is increasing (Col. 12, Lines 2-7 and 21-26) as *existence of said condition of said attribute*. The technique as discussed also performs the step of *receiving by said reporting application raw diagnostic data from said system* as illustrated from Col. 3, Line 63 to Col. 4, Line 26. In order to extract information from the diagnostic data stream, "token types" are utilized. Each token has a label and a value. The value of the token provides a value extracted from the diagnostic data that gives value to the element (Col. 7, Lines 10-20). An element can

have a token defined that is the mathematical result of other tokens. For example, a disk space free token is derived from a simple subtraction from a disk used token and a total disk space token (Col. 9, Lines 42-49). A spot alert could result when the number of parity errors exceeds a predetermined threshold, or when the root partition of a disk exceeds 99%, and an alert would be issued (Col. 12, Lines 4-13). As seen, the technique as discussed indicates the step of *deriving said data about said system attribute to determine if said condition exists*, and *upon determining that said condition exist*, an alert is issued for *notifying said client of the existence of said condition*.

Regarding to claim 2, Wookey teaches all the claimed subject matters as discussed in claim 1, Wookey further discloses the step of *generating derived data based upon the result of said query of said system* (Col. 7, Lines 10-20 and Col. 9, Lines 42-49).

Regarding to claims 3, Wookey teaches all the claimed subject matters as discussed in claims 1, Wookey further discloses *condition is a change in said attribute* (Col. 12, Lines 4-13).

Regarding to claim 4, Wookey teaches a method of monitoring the state and generating alerts indicating predefined conditions exist in a computer system (Abstract and Col. 1, Lines 20-23). As shown in FIGS. 1a and 1b, computer system 100 receives raw diagnostic data from a monitored computer system 102. Monitored computer system 102 runs diagnostic tests on a periodic basis (Col. 3, Line 63-Col. 4, Line 26).

The raw diagnostic data, which contains information about the software and hardware components in monitored system 102, is processed to extract the information associated with hardware and software to create a host state, which is the state of the monitored system over the particular time period that the diagnostic tests were run (Col. 5, Lines 31-47). FIG. 11 is an example of the host state. Once host states have been created, the data can be analyzed for the presence of alerts, which are predefined conditions in the various components of the monitored computer system that indicate operating conditions within the system. Two available types of alerts are spot alert and predictive alert (Col. 11, Line 56-Col. 12, Line 26). For example, if an alert is to determine if a particular partition has exceeded a predetermined percentage used, the alert includes a token for the partition name, e.g., /var. A second token utilized is partition percentage used. The alert determines if partition name=/var AND percentage used is 80%. When those two conditions are true, the alert is raised (Col. 12, Lines 44-55). As seen, alert as *a request is received from a client to notify said client of a condition of an attribute of a system*, and an alert as *request comprises* a name of the monitored system attribute also a predetermined condition as *information specifying a query for said system attribute, wherein attribute is status of a peripheral device*. The defined alert with information specifying a *query for monitoring said system for* a particular value of a system component has exceeded a threshold value, or the number of memory parity errors is increasing (Col. 12, Lines 2-7 and 21-26) as *existence of said condition of said attribute*. In order to extract information from the diagnostic data stream, "token types" are utilized. Each token has a label and a value. The value of the token provides a value



extracted from the diagnostic data that gives value to the element (Col. 7, Lines 10-20). An element can have a token defined that is the mathematical result of other tokens. For example, a disk space free token is derived from a simple subtraction from a disk used token and a total disk space token (Col. 9, Lines 42-49). A spot alert could result when the number of parity errors exceeds a predetermined threshold, or when the root partition of a disk exceeds 99%, and an alert would be issued (Col. 12, Lines 4-13). As seen, the technique as discussed indicates the step of *deriving said data about said system attribute to determine if said condition exists*, and *upon determining that said condition exist*, an alert is issued for *notifying said client of the existence of said condition*.

Regarding to claim 5, Wookey teaches all the claim subject matters as discussed in claim 1, Wookey further discloses *client is selected from the group consisting of a user and a client application program* (FIG. 2).

Regarding to claim 8, Wookey teaches all the claimed subject matters as discussed in claim 1, Wookey further discloses *information specifying a query for said system attribute comprises multiple transactions bracketed together* (Col. 15, Lines 24-54).

Regarding to claims 9, Wookey teaches all the claimed subject matters as discussed in claim 1, Wookey further discloses *multiple transactions bracketed together, wherein upon determining that such bracketed condition exist, notifying said client of the existence of such bracketed conditions* (Col. 15, Lines 16-54).

Regarding to claim 10, Wookey teach all the claimed subject matters as discussed in claim 9, Wookey further discloses *the multiple changes are bracketed together, wherein upon determining that such bracketed changes exist, notifying said client of the existence of such bracketed changes* (Col. 15, Lines 16-54).

Regarding to claim 11, Wookey teaches all the claim subject matters as discussed in claim 1, Wookey further discloses *client is a graphical user interface (GUI) that displays information to a human user* (Col. 16, Lines 41-58).

Regarding to claim 12, Wookey teaches all the claim subject matters as discussed in claim 11, Wookey further discloses the step of *deriving data to determine if a condition of said one or more attributes exists such that the GUI should redraw the graphics displaying said information about said one or more attributes* (Col. 16, Line 41-Col. 17, Line 18).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**5. Claims 13, 16-18 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wookey et al. [USP 6,182,249].**

Regarding to claims 13 and 18, Wookey teaches a method of monitoring the state and generating alerts indicating predefined conditions exist in a computer system (Abstract and Col. 1, Lines 20-23). As shown in FIGS. 1a and 1b, computer system 100 receives raw diagnostic data from a monitored computer system 102. Monitored

computer system 102 runs diagnostic tests on a periodic basis (Col. 3, Line 63-Col. 4, Line 26) by using *a reporting application* as shown in FIG. 2. The raw diagnostic data, which contains information about the software and hardware components in monitored system 102, is processed to extract the information associated with hardware and software to create a host state, which is the state of the monitored system over the particular time period that the diagnostic tests were run (Col. 5, Lines 31-47). FIG. 11 is an example of the host state. Once host states have been created, the data can be analyzed for the presence of alerts, which are predefined conditions in the various components of the monitored computer system that indicate operating conditions within the system. Two available types of alerts are spot alert and predictive alert (Col. 11, Line 56-Col. 12, Line 26). For example, if an alert is to determine if a particular partition has exceeded a predetermined percentage used, the alert includes a token for the partition name, /var, and a second token is partition percentage used. The alert determines if partition name =/var AND percentage used is 80%. When those two conditions are true, the alert is raised (Col. 12, Lines 44-55). As seen, *the reporting application receives* alert as *a request from a client to notify said client of a condition of an attribute of a system*, and an alert as *request comprises* a name of the monitored system attribute also a predetermined condition as *information specifying a query for said system attribute*. In order to extract information from the diagnostic data stream, "token types" are utilized. Each token has a label and a value. The value of the token provides a value extracted from the diagnostic data that gives value to the element (Col. 7, Lines 10-20). An element can have a token defined that is the mathematical result of other tokens.

Art Unit: 2172

For example, a disk space free token is derived from a simple subtraction from a disk used token and a total disk space token (Col. 9, Lines 42-49). A spot alert could result when the number of parity errors exceeds a predetermined threshold, or when the root partition of a disk exceeds 99%, and an alert would be issued (Col. 12, Lines 4-13). As seen, the technique as discussed indicates the step of *deriving said data about said system attribute for determining from said derived data if said condition exists, and upon determining that said condition exist, notifying said client of the existence of said condition*. Wookey does not explicitly teach the step of *querying said system as specified by the alert as request*. However, as disclosed by Wookey, an alert type is defines in a manner similar to a token type defining a token (Col. 12, Lines 46-48). If an alert is to determine if a particular partition has exceeded a predetermined percentage used, the alert includes a token for the partition name, /var, and a second token is partition percentage used. The alert determines if partition name =/var AND percentage used is 80%. When those two conditions are true, the alert is raised (Col. 12, Lines 44-55). A token type is defined in order to extract information from the diagnostic data by having in each token a token name and a test name (Col. 7, Lines 10-20). The diagnostic tests are run, and the results of those diagnostic tests are automatically provided at periodic intervals (Col. 3, Line 63-Col. 4, Line 10). As seen, within an alert is a token, and obviously, the test for *querying the system* must be *specified in the alert or request* in order to have a partition percentage used as in the example above. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to include the test for

querying the system in the alert in order to issue an alert indicating predefined condition exist in a computer system.

Regarding to claim 16, Wookey teaches all the claimed subject matters as discussed in claim 13, Wookey further discloses *condition is a change in said attribute* (Col. 12, Lines 4-13).

Regarding to claim 17, Wookey teaches all the claimed subject matters as discussed in claim 13, Wookey further discloses *multiple conditions bracketed together, wherein upon determining that such bracketed conditions exist, notifying said client of the existence of such bracketed conditions* (Col. 15, Lines 16-54).

Regarding to claim 20, Wookey teaches all the claim subject matters as discussed in claim 18, Wookey further discloses *multiple nodes, wherein at least one of said nodes is executing said reporting application* (FIG. 1).

Regarding to claim 21, Wookey teaches all the claim subject matters as discussed in claim 13, Wookey further discloses the step of *periodically querying the system* (Col. 3, Line 63-Col. 4, Line 26).

Regarding to claim 22, Wookey teaches all the claimed subject matters as discussed in claim 18, Wookey further discloses the step *of monitoring system to determine if said condition exist* (Col. 12, Lines 44-55).

**6. Claims 7 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wookey et al. [USP 6,182,249] in view of Sybase [Transact-SQL User's Guide, Copyright 1996].**

Regarding to claim 7, Wookey teaches a method of monitoring the state and generating alerts indicating predefined conditions exist in a computer system (Abstract and Col. 1, Lines 20-23). As shown in FIGS. 1a and 1b, computer system 100 receives raw diagnostic data from a monitored computer system 102. Monitored computer system 102 runs diagnostic tests on a periodic basis (Col. 3, Line 63-Col. 4, Line 26). The raw diagnostic data, which contains information about the software and hardware components in monitored system 102, is processed to extract the information associated with hardware and software to create a host state, which is the state of the monitored system over the particular time period that the diagnostic tests were run (Col. 5, Lines 31-47). FIG. 11 is an example of the host state. Once host states have been created, the data can be analyzed for the presence of alerts, which are predefined conditions in the various components of the monitored computer system that indicate operating conditions within the system. Two available types of alerts are spot alert and predictive alert (Col. 11, Line 56-Col. 12, Line 26). For example, if an alert is to

determine if a particular partition has exceeded a predetermined percentage used, the alert includes a token for the partition name, /var, and a second token is partition percentage used. The alert determines if partition name =/var AND percentage used is 80%. When those two conditions are true, the alert is raised (Col. 12, Lines 44-55). As seen, alert as *a request is received from a client to notify said client of a condition of an attribute of a system*, and an alert as *request comprises* a name of the monitored system attribute also a predetermined condition as *information specifying a query for said system attribute*. In order to extract information from the diagnostic data stream, "token types" are utilized. Each token has a label and a value. The value of the token provides a value extracted from the diagnostic data that gives value to the element (Col. 7, Lines 10-20). An element can have a token defined that is the mathematical result of other tokens. For example, a disk space free token is derived from a simple subtraction from a disk used token and a total disk space token (Col. 9, Lines 42-49). A spot alert could result when the number of parity errors exceeds a predetermined threshold, or when the root partition of a disk exceeds 99%, and an alert would be issued (Col. 12, Lines 4-13). As seen, the technique as discussed indicates the step of *deriving said data about said system attribute for determining from said derived data if said condition exists*, and *upon determining that said condition exist, notifying said client of the existence of said condition*. Wookey does not explicitly teach the step of *querying said system as specified by the alert as request*, and fails to disclose *an SQL query comprises an SQL view* is used to specify a query. However, as disclosed by Wookey, an alert type is defines in a manner similar to a token type defining a token (Col. 12, Lines 46-48). If an alert is to determine if a



particular partition has exceeded a predetermined percentage used, the alert includes a token for the partition name, /var, and a second token is partition percentage used. The alert determines if partition name =/var AND percentage used is 80%. When those two conditions are true, the alert is raised (Col. 12, Lines 44-55). A token type is defined in order to extract information from the diagnostic data by having in each token a token name and a test name (Col. 7, Lines 10-20). The diagnostic tests are run, and the results of those diagnostic tests are automatically provided at periodic intervals (Col. 3, Line 63-Col. 4, Line 10). As seen, within an alert is a token, and obviously, the test for *querying the system* must be *specified in the* alert or *request* in order to have a partition percentage used as in the example above.

Sybase teaches SQL as a high-level language includes commands for retrieving data from a database, creating database object and other functions (Sybase, Chapter 1: Introduction, Overview). As shown in Chapter 1 is the method of creating SQL statements by using select command. As shown in Chapter 14 is the method of creating trigger conditions by using SQL statements. Sybase further discloses: *SQL query comprises an SQL view* (Sybase, Chapter 8, Views: Limiting access to Data, Creating Views).

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to include the test for querying the system in the alert and using SQL to implement the test in order to issue an alert indicating predefined condition exist in a computer system.

Regarding to claim 14, Wookey teaches all the claimed subject matters as discussed in claim 13, but fails to teach *information specifying a query for said system attribute is an SQL query*. Sybase teaches SQL as a high level language for relational database system and using query as a request for retrieval of data by using the select command (Sybase, Chapter 1: Introduction, Overview and Queries, Data Modification). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to use SQL for implementing the test in order to issue an alert indicating predefined condition exist in a computer system.


**Conclusion**

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUNG Q PHAM whose telephone number is 703-605-4242. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOHN E BREENE can be reached on 703-305-9790. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner Hung Pham  
July 12, 2004

  
SHAHID ALAM  
PRIMARY EXAMINER